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NAVAL WAR COLLEGE
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GO NAVY! ~~BEAT~~ GO ARMY?
AN ANALYSIS OF THE AIR INTERDICTION MISSION AS ONE STEP TOWARDS A TRUE JOINT FORCE.

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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INTRODUCTION

Passage of the Goldwater-Nichols Act of 1986 signaled the beginning of a transformation of the United States military into a Joint organization. Although initially not welcomed by the individual services, this transformation proved beneficial to them all. Inter-service cooperation increased and operations became more efficient and effective. However, a large gap still exists. Service doctrine and training exercises are still largely executed down traditional Army/Air Force and Navy/Marine Corps lines.

Until recently these delineations made sense. However, with the demise of the Soviet Union, the Navy began a transition from blue water operations to littoral power projection, and the Army started a conversion to a lighter, more mobile force. These changes will result in more operations in which tactical naval aviation supplies an increasing portion of the air assets supporting Army forces.

Unfortunately the Navy and Army have not adapted to this new environment. Current training exercises, doctrine, and staffs do not optimize the Joint Force Air Component Commander's (JFACC) use of naval air assets in the air interdiction mission. There is a lack of integration and familiarity between Army forces and naval aviation that hinders the JFACC's ability to achieve unity of effort in the

allocation of his forces. In situations where a Navy commander is designated as JFACC, this ignorance of Army concepts and culture will lead to a breakdown in trust and seriously affect his ability to create a plan that optimizes the use of air power while simultaneously supporting the Joint Force Land Component Commander (JFLCC). It is time for the Army and Navy to break their traditional habits and begin to work together.

Using air interdiction operations inside of the Fire Support Coordination Line (FSCL) in support of Army Corps as a base, this paper will examine doctrine, training exercises, and staff composition and functions to demonstrate the lack of integration between the Army and Navy. It will show that this lack of integration will limit the JFACC's options in the employment of naval air assets in the air interdiction mission. Furthermore, it will show that a Navy JFACC may not be adequately prepared to create and implement a plan that balances the most effective use of air power with the needs of the JFLCC. Finally, it will make recommendations that will close the Army/Navy gap and improve the JFACC's flexibility and effectiveness.

THE PROBLEM

"Air Interdiction Operations are defined as air operations conducted to destroy, neutralize, or delay the enemy's military potential before it can be brought to bear effectively against friendly forces."[1] It is not Close Air Support (CAS), but can occur both short of and beyond the FSCL. Air interdiction operations conducted inside of the FSCL maintain several distinctions from those outside it. First, they "are controlled by the appropriate land or amphibious force commander."[2] Second, they require "detailed synchronization, increased communications assets, more restrictive rules of engagement, positive identification procedures, and more key personnel involved in the decision cycle."[3] Finally, they are more hazardous. "All attacks short of the FSCL must be coordinated with the establishing component, primarily to…prevent fratricide…. Missions attacking…will often be required to *positively identify* their targets."[4] It could be argued that air interdiction inside of the FSCL has more potential for fratricide than CAS, because it retains much of the dynamics of a changing battle space without the assistance of a Forward Air Controller (FAC).

History is full of examples that demonstrate the importance of air interdiction. Operation DESERT STORM reveals the devastating effects of properly synchronized air

interdiction and ground maneuver.[5] In contrast, Operation ALLIED FORCE demonstrates how the lack of a ground element can limit the ability of air assets to successfully target dispersed ground forces.[6] Therefore, while air interdiction "can significantly affect the overall course of a campaign,"[7] it is much more effective when synchronized with ground maneuver or a ground element. In addition, U.S. Joint Forces Command has selected "battlefield interdiction" as one of "nine joint warfighting areas that will have the greatest immediate impact on joint warfighting."[8]

It would appear obvious that the Navy would want its tactical air forces to be prepared to operate with units that could utilize this decisive warfighting method. In fact, Navy doctrine states, "We remain committed to achieving success in conducting the full range of joint operations."[9] However, a careful review of major "joint" exercises conducted by U.S. armed forces reveals that although progress has been made, training is still executed down traditional Army/Air Force and Navy/Marine Corps lines.[10] There is very little integration of naval air with Army forces. Navy air interdiction inside an Army FSCL is seldom practiced at the tactical level or investigated at the operational level.

With regard to naval air inclusion in plans to support land forces inside of the FSCL, Army Joint Automation Support

Team (AJAST) Leader Mike Huggins claims, "We seldom see this in exercises."[11] Similarly, in recent years the Navy's participation in one of the Army's largest joint exercises, Roving Sands, has been limited to a few simulated ships and no tactical aviation.[12] It is understandable that most naval air squadrons would be unable to fly in many of these exercises due to demanding turnaround training plans and limitations on funding and assets. What is not understandable is that representatives from AJAST[13] and Roving Sands[14] both cited lack of Navy representation in the planning and development of these exercises.

The best opportunities to integrate the Army and Navy in both live fly events and operational staff training are the Joint Task Force Exercises (JTFEX) every battle group must complete before it deploys. A few of these exercises have integrated the Army, but only on a limited scale. During JTFEX 01-1 and 01-3, less than 40 Army personnel were involved in an exercise that included thousands of sailors. During JTFEX 01-2 only three Army personnel were utilized. Unfortunately even during the exercises where the Army was nominally represented, the naval air support was notional.[15]

Joint doctrine lists "conducting joint training" as a responsibility for service component commanders.[16] Research clearly shows Army and Navy units are not working together on

any significant scale, and training, both on the operational and tactical level, is still largely conducted down traditional service lines, especially with regard to air interdiction inside of the FSCL. Even during operational exercises where forces are simulated, naval air assets are not integrated into this crucial mission. This limitation in training results in two major issues:

First, naval air forces are not optimally prepared to execute this mission. Although joint doctrine standardizes operational and tactical procedures, this does not make up for the total lack of integration of Army and Navy forces in training. History proves that a lack of familiarity between forces that must be closely integrated in combat can be detrimental to mission accomplishment. "The participating service units trained separately; they met for the first time in the desert in Iran, at Desert One."[17]

The second issue resulting from this lack of service integration is that the services are not benefiting from experience in training together. The Air Force and Army generate a huge volume of lessons learned from working together. The Navy has little to none. A search of the Navy Warfare Development Command's active lessons learned database found only three documents that contained the terms "air interdiction" and "navy" or "USN" or "naval," and even those

do not contain information on naval air in the air interdiction role.[18] In addition, this database contains inputs from all services except, surprisingly, the Army. The Army used to be included, but several years ago they stopped sending updates because "they no longer cared to participate."[19] It could be argued that the Navy can benefit from reading Air Force lessons learned. Indeed, this is a valuable source of information, but is not an adequate substitute for the experience gained from working together. The importance of lessons learned from actual training events is tremendous, but its importance between the Army and Navy is uncertain.

The Reason

Obviously the Army and Air Force have a long history of close integration.[20] The Navy, on the other hand, is historically an independent institution.[21] The method of how, and with whom, each of the services prepares for war is at least partially driven by these histories.

Army Corps staffs reflect the long history between the Army and the Air Force. Each staff has a permanent Air Support Operations Center (ASOC) and Tactical Air Control Party (TACP) assigned to integrate air support to ground forces. The Corps Air Liaison Officer (ALO) is the senior Air

Force Officer assigned. He is normally the director of the ASOC and exercises operational control of all subordinate TACPs. He also has a direct link to the Command Group, and helps the Corps Operations (G3) section plan the employment of forecast interdiction sorties.[22] The Corps also maintains a Deep Operations Coordination Cell (DOCC) that helps integrate and synchronize target selection and attack. A member of his TACP represents the ALO in the DOCC.[23]

Naval aviation has no permanent presence on the Corps staff. The Air and Naval Gunfire Liaison Company (ANGLICO) is a Marine Corps unit designed to provide control and liaison for naval surface fire support and CAS to division size units. ANGLICO units are only attached to Army divisions for a specific operation and have no Corps equivalent.[24] Currently only two ANGLICO units exist, and all of their mission capabilities reside in the reserve force.

It could be argued that the ALO understands all of the pertinent aspects of air support to ground operations so a permanent naval air presence is not required. If this is the case, then the reverse should also be true and a properly trained naval aviator should be able to fill the billet. In any case, the permanent Air Force presence on Army Corps staffs benefits both services by increasing trust and an understanding of each service's culture.

Another part of the problem is the lack of standardization between the services in describing certain mission types. The Air Force flies "air interdiction" while the Navy is "providing…naval support for land operations" and the Marine Corps is flying "offensive air support."[25] These are three ways of describing tactical aviation missions. Unfortunately, they are all describing basically the same mission. Fortunately the Air Tasking Order (ATO) is fairly standardized in mission description. However, since coordinated training between the Army and naval aviation is so limited, Army long-range planners will at least partially rely on doctrine.

Although air interdiction is listed as a naval air mission in some publications, the lack of standardization in labeling air power missions leads to confusion and a perception by the Army that naval aviation is not a valuable asset to ground operations. Indeed, the Army sees the Air Force support as "invaluable in creating the conditions for success before and during land operations." Conversely, the Navy "affords Army forces uninhibited transit to any trouble spot in the world."[26]

Any Army expectation that naval aviation could play a significant role in the support of ground elements should certainly be limited when they consider that the Marine Corps

does not rely on the Navy, but maintains its own fixed wing assets to support ground operations.[27] Ultimately research clearly shows that the Army and Air Force have a long-standing, complex integration that ensures a thorough understanding of each service's needs and cultures. It is also clear that this is an integration the Navy does not share.

The Result

The primary concern for the Joint Force Commander (JFC) is that this lack of joint training and integration on a service-wide scale will limit the JFACC's ability to fully exploit the capabilities of joint air operations. The JFACC is responsible for planning and executing the overall air interdiction effort. In order to be successful, interdiction operations must maintain sustained, concentrated pressure, utilize appropriate munitions and assets, and synchronize with ground maneuver. In a situation where "nominated targets will usually outnumber assets capable of attacking them," the JFACC and his staff must craft a plan that maximizes unity of effort while coordinating innumerable details.[28] If naval aviation supplies a significant portion of the air interdiction effort, the JFACC will be limited in his ability to optimally allocate assets. Based on his experience in exercises, he may not

assign naval air assets to air interdiction missions inside of the FSCL even though they might be the most appropriate platforms to execute the mission.

Worse yet, the JFACC may not be aware of this deficiency in training and assign these assets to a mission for which they are not prepared. During crucial early stages of battle, this will cause a situation where, at best, combat effectiveness will be reduced and, at worst, the possibility for fratricide will rise to an unacceptable level. Recent events in training and combat are excellent examples of the potential results. In Kuwait on March 12, 2001 a Navy F/A-18 killed five Army soldiers and one New Zealander with misplaced bombs.[29] Less than nine months later another Navy aircraft wounded five more Army soldiers in Afghanistan.[30] What is worse is that these mishaps occurred under relatively low threat conditions and with the assistance of a FAC.

The problem is even more severe if the JFC assigns JFACC duties to the Navy. In this case naval air constitutes a majority of the available assets, and the organization responsible for designing an air plan that maximizes unity of effort and effectiveness is a Navy dominated JFACC that has little to no training or experience with significant Army forces.[31] In addition, Army doctrine correctly predicts the size of the organization that is responsible for coordinating

the air interdiction effort with the JFACC, the Battlefield Coordination Detachment (BCD), will be significantly reduced due to space limitations onboard the command ship.[32] This combination results in reduced interoperability, trust and credibility between the JFLCC and JFACC. If a Navy commander is ever going to succeed in the role of JFACC while supporting significant Army forces, he and his staff will require a detailed knowledge of the needs of the force he is supporting, and the experience to apply that knowledge effectively.

The Solutions

First, the designation of air power missions needs to be standardized. If it is describing the same mission, it should have the same name, regardless of which service is performing it.

Second, Army, Navy, and Air Force doctrine should continue to be adjusted to reflect both the Navy's increasing joint focus and shift towards littoral warfare, and the standardization of air power missions. The Air Force, Army, and Navy all publish doctrine that either use non-standard, confusing terminology or do not emphasize naval air as an air interdiction asset.[33]

Third, naval aviation needs to get involved in as many of the major joint exercises as possible. In most cases actual

squadron participation will not be possible, but operational staffs should usually be available to plan and execute exercises that test the operational aspects of naval air integration, generate lessons learned, and increase the Army's awareness of the Navy as a valuable air interdiction asset.

Also, with the addition of a few more personnel and some scenario modifications, each JTFEX could be an excellent opportunity to plan and execute, both on the tactical and operational levels, an exercise that truly integrates naval air and Army forces and synchronizes air interdiction and maneuver. With only a few minor changes, JTFEX could not only fully integrate the BCD into the Navy JFACC staff, but also incorporate a DOCC to exercise the full range of fire support coordination measures, including a rapidly moving FSCL. A target's location relative to the FSCL determines who controls it and the level of coordination required to attack it. A dynamic battle space with a rapidly moving FSCL would be the best way to test the ability of the Navy JFACC, ASOC, DOCC, TACPs, and tactical aircraft to locate, nominate, approve, and effectively attack targets. This would not only generate a wealth of lessons learned, but also solidify familiarity and trust, and prove the ability of a Navy JFACC to design and implement the overall air interdiction effort for a complex

battle problem. These exercises are held often enough that each Corps could participate in one every year.

Fourth, a permanent Naval Air Liaison Officer (NALO) should be assigned to every Army Corps staff to complement the Air Force ALO. This aviator should ideally be a LCDR or above and FAC, FAC(Airborne), and Joint Professional Military Education qualified. He should assist the ALO in the training of TACPs and closely integrate with the Corps G3 section. This would enable him to ensure all opportunities for training with naval air assets are taken advantage of and optimize Army/Navy interoperability in these exercises. In addition, he should be intimately familiar with the DOCC and plans element to ensure he has a detailed knowledge of Corps requirements and concept of operations. A naval aviator with a thorough knowledge of the JFLCC's concept of operations would be an excellent bridge between all three services. He would be especially useful to a Navy JFACC staff in relating the needs of the JFLCC and recognizing areas of potential confusion or conflict.

This change is not intended to create an additional command and control system or duplicate effort, but should offer the Army Corps commander a joint Air Force/Navy air support element instead of a service specific one. Similar efforts are already in practice in Training Squadron EIGHTY-

SIX where the two services work together to train Naval Flight Officers. This billet would also serve as one more step toward creating Navy JFACCs and JFCs who are exceptionally knowledgeable about all services needs, capabilities, and cultures and thus better prepared to lead and integrate a joint force.

CONCLUSION

The conduct of air interdiction inside the FSCL will play a large part in the success of future operations. Unfortunately, current training exercises, doctrine, and staff compositions do not optimize the JFACC's use of naval air assets in this vital mission. The Army and Navy still train primarily along traditional, separate lines. Although Joint doctrine calls for service integration, it does not reflect the value of naval air to the JFLCC. Also, non-standard mission descriptions between the services result in confusion as to what naval air can offer. The Air Force has long maintained a permanent presence on Army Corps staffs to ensure the optimum employment of air power. This arrangement guarantees a transfer of information, experience and culture between the two services that enhances both present and future operations. Naval aviation has no similar representation.

The result of these deficiencies is a force that is not adequately prepared to perform the air interdiction mission inside the FSCL. This will limit the JFACC's flexibility and ability to mass effects. In the case of a Navy JFACC these deficiencies result in an organization that is not adequately prepared to construct and integrate an effective joint air interdiction campaign.

The first step in correcting this problem is a revision in doctrine that standardizes mission descriptions and emphasizes naval air as a potent force for the JFLCC. The second step is to increase the integration, both tactical and operational, of naval air with Army forces, especially during JTFEX. Finally, the assignment of a naval aviator to Army Corps staffs will increase the quality and frequency of joint training opportunities, enhance interoperability and improve the quality of future naval JFACCs and JFCs.

Notes

[1] Joint Chiefs of Staff, Doctrine for Joint Interdiction Operations, Joint Pub (JP) 3-03 (Washington, DC: 10 April, 1997), II-4.
[2] Ibid., II-4-5.
[3] Ibid., II-15.
[4] Department of the Air Force, Counterland, Air Force Doctrine Document (AFDD) 2-1.3 (Washington DC: 27 August 1999), 59-61 [Emphasis in the original].
[5] JP 3-03, II-5-6.
[6] Benjamin Lambeth, The Transformation of American Air Power (Ithaca: Cornel University Press 2000), 189.
[7] AFDD 2-1.3, 23.
[8] Harold Gehman, "Progress Report on Joint Experimentation," Joint Forces Quarterly, (Summer 2000): 81.
[9] Department of the Navy, Naval Warfare, Naval Doctrine Publication (NDP) 1 (Washington, DC: 28 March 1994), 25.
[10] Exercises examined were conducted within the last five years and include JTFEX, Roving Sands, Ulchi-Focus Lens, and Fleet Battle Experiment INDIA. Also considered were authors experience as a member of VF-213 and VF-32 in four battle group work-up cycles and three deployments.
[11] Mike Huggins, mike.hugguns@hurlbert.af.mil "RE: LCDR John Chewing, research questions" [E-mail to John Chewning chewninj@nwc.navy.mil] 11 December 2001.
[12] James Johnson, James.Johnson@forscom.army.mil "RE: research questions" [E-mail to John Chewning chewninj@nwc.navy.mil] 9 January 2002.
[13] Robert Harrington, Robert.Harrington@hurlbert.af.mil "RE: LCDR John Chewning, research questions" [E-mail to John Chewning chewninj@nwc.navy.mil] 9 January 2002.
[14] James Johnson, James.Johnson@forscom.army.mil "RE: research questions" [E-mail to John Chewning chewninj@nwc.navy.mil] 10 January 2002.
[15] Howard Thevenet, j727@secondflt.navy.mil "RE: JTFEX questions" [E-mail to John Chewning chewninj@nwc.navy.mil] 9 January 2002.
[16] Joint Chiefs of Staff, Joint Task Force (JTF) Planning Guidance and procedures, JP 5-00.2 (Washington, DC: 13 January 1999), III-4.
[17] James Locher, "Has it Worked? The Goldwater-Nichols Reorganization Act," Naval War College Review, (Autumn 2001): 100.
[18] Navy Warfare Development Command, Navy Lessons Learned Database, volume 01-04 (Newport: November 2001), Combined.
[19] Bruce McCroskey, mccroskeyba@clf.navy.mil "RE: army lessons learned" [E-mail to John Chewning chewninj@nwc.navy.mil] 7 January 2002.
[20] Department of the Army, Battlefield Coordination Detachment (BCD), Field Manual (FM) 100-13 (Washington DC: 5 September 1996), vii.
[21] Carl Builder, The Masks of War (Baltimore: The Johns Hopkins University Press 1989), 31.
[22] Department of the Army, Corps Operations, FM 100-15 (Washington DC: 29 October 1996), 4-22.
[23] Huggins.
[24] FM 100-15, A-4-5.
[25] Ibid., 1-11-12.
[26] Department of the Army, Operations, FM 3-0 (Washington DC: 14 June 2001), 2-7-8.
[27] AFDD 2-1.3, 8.
[28] JP 3-03, II-14.
[29] "U.S. Navy Training Accident Kills Six in Kuwait," World News Digest, 15 March 2001. http://www.2facts.com/stories/index/2001207390.asp [29 January 2002].
[30] "Eyewitness: American 'Friendly Fire' Casualties," usnews.com, 26 November 2001, http://www.usnews.com/usnews/news/terror/articles/frontline011126.htm[31 January 2002].
[31] FM 100-13, B-1.
[32] Ibid., B-1-7.
[33] NDP 1, 26. FM 100-15, 1-12. FM 3-0, 2-7. Department of the Air Force, Air Force Basic Doctrine, AFDD 1 (Washington DC: 1 September 1997), 61.

Bibliography

Builder, Carl H. The Masks of War. Baltimore: The Johns Hopkins University Press, 1989.

Gehman, Harold W. "Progress Report on Joint Experimentation." Joint Forces Quarterly, (Summer 2000): 77-82.

Joint Military Operations Department. Fleet Battle Experiment India. Naval War College Document 1004. Newport: October 2001.

Lambeth, Benjamin S. The Transformation of American Air Power. Ithaca: Cornel University Press, 2000.

Laughbaum, Kent R. Synchronizing Airpower and Firepower in the Deep Battle. Maxwell Air Force Base: Air University Press, 1999.

Locher, James R. "Has it Worked? The Goldwater-Nichols Reorganization Act." Naval War College Review, (Autumn 2001): 95-115.

Navy Warfare Development Command. Navy Lessons Learned Database. Volume 01-04. Newport: November 2001.

New, Terry L. "Where to Draw the Line between Air and Land Battle." Airpower Journal, vol. 10 no. 3 (Fall 1996): 34-49.

R.O.K.-U.S. Combined Forces Command. Ulchi-Focus Lens 01 Exercise Directive. APO AP 96205-0028, 2001.

U.S. Department of the Air Force. Air Force Basic Doctrine. Air Force Doctrine Document (AFDD) 1. Washington, DC: 1 September 1997.

_____. Airspace Control in the Combat Zone. AFDD 2-1.7. Washington, DC: 9 May 2001.

_____. Air Warfare. AFDD2-1. Washington, DC: 22 January 2000.

_____. Command and Control. AFDD 2-8. Washington, DC: 16 February 2001.

_____. Counterland. AFDD 2-1.3. Washington, DC: 27 August 1999.

_____. Organization and Employment of Aerospace Power. AFDD 2. Washington, DC: 17 February 2000.

U.S. Department of the Army. Battlefield Coordination Detachment (BCD). Field Manual (FM) 100-13. Washington, DC: 5 September 1996.

_____. Corps Operations. FM 100-15. Washington, DC: 29 October 1996.

_____. Fire Support in the Airland Battle. FM 6-20. Washington, DC: 17 May 1988.

_____. ICAC2 - Multiservice procedures for the Integrated Combat Airspace Command and Control. FM 3-100.2. Washington, DC: 30 June 2000.

_____. Operations. FM 3-0. Washington, DC: 14 June 2001.

_____. Tactics, Techniques, and Procedures for Fire Support for Corps and Division Operations. FM 6-20-30. Washington, DC: 18 October 1989.

U.S. Department of the Navy. Naval Warfare. Naval Doctrine Publication 1. Washington, DC: 28 March 1994.

U.S. Joint Chiefs of Staff. Doctrine for Joint Interdiction Operations. Joint Pub (JP) 3-03. Washington, DC: 10 April 1997.

_____. Joint Task Force (JTF) Planning Guidance and procedures. JP 5-00.2. Washington, DC: 13 January 1999.

_____. Joint Warfare of the Armed Forces of the United States. JP 1. Washington, DC: 14 November 2000.

_____. Unified Action Armed Forces (UNAAF). JP 0-2. Washington, DC: 10 July 2001.